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EXAMINER

POON, KING Y

ART UNIT	PAPER NUMBER
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2624

DATE MAILED: 12/30/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/471,162

Applicant(s)

MATSUBAYASHI, KAZUHIRO

Examiner

King Y. Poon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/23/2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,5,8-12,15,16,19-23,26,27 and 30-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,5,8-12,15,16,19-23,26,27 and 30-33 is/are rejected.
- 7) ☒ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 12/28/1998 and 12/9/1999. It is noted, from the copy of the stamped and dated returned receipt postcard, that the office has received the certified copies of the priority documents. Those certified documents has not been placed of record in the file.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 5, 8-11, 16, 19-22, 27, 30-33 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitations of "associating each display object with size information having a relation between a size of a document output area and a size of a displayed object" found in claims 5, 16, and 27 are subject matter which was not described in the specification in such a way as to

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reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 8-11, 19-22, 30-33 are rejected under 35 U.S.C. 112, first paragraph because they depend on rejected claims 5, 16, and 27.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The change made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1, 4, 12, 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Miyaza (US 5,896,470).

Regarding claim 1: Miyaza teaches an information processing apparatus (digital copy machine, column 70, line 30) which comprises: area size determining means (calculating means that calculates a width/size of the line that constructs magnified characters, column 72, lines 29-32) for determining a size (width of a line of a magnified characters, column 72, line 15, e.g., fig. 91a) of a document output area (the magnified

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characters are to be outputted to an area of a print sheet, column 72, lines 43-48; therefore, the size of the magnified characters are the document output area) when document data (e.g., characters and image data, column 72, lines 23-25, 50, fig. 91a, that is to be printed) is outputted to an output apparatus (output means, column 72, lines 38-42) based on layout information (the size of the characters, e.g., sized of the magnified characters, column 71, lines 35-45, and the different shape and position of characters, e.g., 50, fig. 91a); information memory means (main memory, column 70, lines 50-55) for storing a plurality of size information (the values of the highest and lowest limits, column 70, lines 54-56) having a relation between a size of a document output area (the highest and the lowest limit determine the range of the size of the magnified characters to be outputted, column 71, lines 46-53) and the size of each of the plural kinds of objects (characters, fig. 91a, the highest and lowest limits determine the actual size of the character that is to be outputted; e.g., outputting the size of the magnified characters when the magnified characters are within the limits or outputting the size of the corrected characters when the magnified characters are outside the limits, column 71, lines 39-55) included in the document data (document data outputted, column 72, lines 23-25 includes actual sized of the character); object size determining means (the circuit or program step S40 of fig. 90 that determines the actual size of the character to be outputted, e.g., outputting the size of the magnified character or the size of the corrected character, column 71, lines 39-55) for determining a size of each of the plural kinds of objects (the actual size of characters to be printed, e.g., characters 62, or 63, column 71, lines 35-55) based on the size (e.g., the size of the magnified

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characters, column 71, lines 35-40, and column 71, lines 45-55) determined by the area size determining means and the size information (the values of the highest and lowest limits, column 70, lines 54-56) stored in the information memory means; size changing means (the circuit or program step S43 of fig. 90) for changing (correction, column 71, lines 50-55) the size (column 71, lines 50-51) of the size of each of the plural kinds of objects (characters) based on each size (e.g., the size of the character is determined to be the size of the predetermined range, column 71, line 50-52) determined by the object size determining means (no of S40, fig. 90) respectively; and control means (compositing means, column 72, lines 20-25, lines 36-38) for outputting each of the plural kinds of objects whose size has been changed by the size changing means to the output apparatus (column 72, lines 20-25).

Regarding claim 4: Miyaza teaches wherein the size information of each of the plural kinds of objects comprises function information, (since the actual size of the character that is to be outputted is a function of magnification rate, column 71, line 8, and the size of the character that is to be magnified by the magnification rate; (inherent properties of magnifying a character by a magnification rate); the highest and the lowest limits, column 70, lines 45-56, are limits for the function of the actual size of the character that is to be outputted) which is different for each of the plural kinds of objects. (fig. 91 a shows 8 different characters)

Regarding claim 12: Miyaza teaches an information processing method comprises: an area size determining step (calculating a width/size of the line that constructs a magnified character, column 72, lines 29-32) of determining a size (width of

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line, column 72, line 15) of a document output area (the magnified character is to be outputted to an area of a print sheet, column 72, lines 43-48) when document data (e.g., the characters and image data, column 72, lines 23-25, 50, fig. 91a that is to be printed) is outputted to an output apparatus (output means, column 72, lines 38-42) based on layout information (the size of the character, e.g., sized of the magnified character, column 71, lines 35-45, and the different shape and position of characters, e.g., 50, fig. 91a); an object size determining step (S40 of fig. 90 that determines the actual size of the character to be outputted, e.g., outputting the size of the magnified character or the size of the corrected character, column 71, lines 39-55) of determining a size of each of a plural kinds of object (different characters of fig. 91a; the actual size of character to be printed, e.g., character 62, or 63, column 71, lines 35-55) based on size information (the values of the highest and the lowest limits, column 70, lines 54-56) having a relation between a size of a document output area (the highest and the lowest limit determine the range of the size of the magnified character/document output area to be outputted, column 71, lines 46-53) stored in information memory means (the size of the magnified character is to be compared with the limits in the judging means, column 72, lines 14-20; Inherently, when a signal is compared with other signal in a processor, both signals must be stored in a memory/circuit that prevents the signal from disappearing for at least the time that would take the processor to complete the comparing process; therefore, the size of the magnified character/document output area is stored) and a size of each kind of the object of the plural kinds of objects (the highest and lowest limits determine the actual size of the character that is to be outputted; e.g., outputting the

size of the magnified character when the magnified character is within the limits or outputting the size of the corrected character when the magnified character is outside the limits, column 71, lines 39-55) included in the document data (actual character size data is included in the document data, column 72, lines 20-25), the size (the size of the magnified character, column 71, lines 35-40) determined in the area size determining step, a size changing step (S43, fig., 90, and column 71, lines 45-55) of changing (correction, column 71, lines 50-55) the size (column 71, lines 50-51) of each of the plural kinds of object (characters, fig. 91a) based on each size (e.g., the size is determined to be the predetermined range, column 71, lines 50-52) determined in the object size determining step (no of S40, fig. 90); and an output step (the step of outputting character data from the compositing means to the output means, column 72, lines 20-25; i.e., the character data is first composited by the compositing means and the composited character data is then outputted by the output means; therefore, the composited character data is outputted from the compositing means to the outputting means) of outputting each of the plural kinds of objects whose size has been changed in the changing step to the output apparatus (output means, column 72, line 24).

Regarding claim 15: Miyaza teaches wherein the size information of each of the plural kinds of object comprise function information (since the actual size of the character that is to be outputted is a function of magnification rate, column 71, line 8, and the size of the character that is to be magnified by the magnification rate; (inherent properties of magnifying a character by a magnification rate); the highest and the lowest limits, column 70, lines 45-56, are limits for the function of the actual size of the

character that is to be outputted), which is different for each of the plural kinds of objects. (column 71, lines 39-55, fig. 91a)

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 23, 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyaza (US 5,896,470).

Regarding claims 23, 26: Miyaza teaches an image processing CPU (column 70, lines 30-35) performs function steps, as discussed in claims 12, 15 using embodiment 41.

Miyaza, in embodiment 41, does not teach a memory medium which stores a computer readable program to control the CPU.

However, Miyaza, in embodiment 30 teaches a memory medium (ROM 102, column 52, lines 40-45) which stores a computer readable program (column 52, line 42) for controlling a CPU. (CPU 101, column 52, lines 40-43)

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Miyaza' CPU to include: a memory

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medium which stores a computer readable program to control the CPU for performing processing steps.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the CPU of Miyaza because of the following reasons: (a) using a computer program for controlling a CPU would have reduced the price of the CPU because it would reduce all the additional hardware that is required for the CPU to performing all the functions; it would also have allowed the same type of CPU to be programmed differently to perform different functions; and (b) using a memory for storing the program would have prevented the program from being lost such that the program can be used over and over again to control the CPU.

7. Claims 5, 8, 11, 16, 19, 22, 27, 30, 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyaza (US 5,896,470) in view of Aoyama (US 5,136,399).

Regarding claim 5: Miyaza teaches an information processing apparatus (digital copying machine, column 70, line 30) which comprises: layout information memory means (main memory 73, column 71, lines 10-15) for storing layout information (e.g., the position of where the image of the document is to be placed, fig. 91a, the shape of the character, fig. 91a, are in the image data stored in the main memory) when document data (image data, column 71, lines 10-15, e.g., characters 50, fig. 91a) is outputted to an output apparatus (output means, column 72, line 24; the image data is reproduced and outputted to the output means, column 72, lines 20-25); a display screen (41, fig. 4, column 8, lines 65-66) for displaying; and associating means

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(magnifying means, column 72, lines 12-13, and judging means, column 72, lines 20-21) for associating document objects (characters 62 or 63, column 71, lines 45-55, fig. 91a) with size information (values of the highest and lowest limits, column 70, lines 54-56) having a relation between a size of a document output area (the highest and the lowest limit determine the range of the size of the magnified character to be outputted, column 71, lines 46-53; the size of the magnified character is the size of a document output area) and a size of the object (the size of the magnified character, column 71, lines 45-55; the highest and lowest limits determine the actual size of the character that is to be outputted; e.g., outputting the size of the magnified character when the magnified character is within the limits or outputting the size of the corrected character when the magnified character is outside the limits, column 71, lines 39-55; the size of the object is the actual print size of the character when the document is printed) when the document data is outputted (image data of the document is reproduced and outputted from compositing means, column 72, lines 21-25, to the output means) to the output apparatus (output means, column 72, lines 24) based on the layout information (e.g., the position of where the image of the document is to be placed, fig. 91a, the shape of the character, fig. 91a).

Miyaza does not teach display control means for displaying the two or more objects included in the document on the display screen.

Aoyama, in the same area of copying document using a copier (column 4, line 30), teaches display control means (21, fig. 2) for displaying two or more objects (e.g.,

circle graph 30, column 7, lines 43-45; document image, column 7, lines 29-40) included in the document on a display screen. (Display unit 22, column 7, line 32)

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the display of Miyaza to include: display control means for displaying the two or more objects included in the document on the display screen.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the display of Miyaza by the teaching of Aoyama because of the following reasons: (a) using a display controller to control a display would have allowed other controllers, such as the image processing controller 74, of fig. 5, Miyaza, of the copier, to perform image processing function without having to control the display; it would have increased the processing speed of the copier to increase productivity; and (b) displaying the document objects would have allowed users to view the objects first before printing and thereby reduces copying error such as copying the wrong document or a part of the object is not being copied.

Note: the document object is being displayed after the modification by Aoyama. In other word, the document object is the same object that is being displayed. Therefore, the size information that is associated with the document object is also associated with the displayed object.

Regarding claim 8: Miyaza teaches wherein the size information associated with each of the two or more kinds of objects is function information (since the actual size of the character that is to be outputted is a function of magnification rate, column 71, line

8, and the size of the character that is to be magnified by the magnification rate; (inherent properties of magnifying a character by a magnification rate); the highest and the lowest limits, column 70, lines 45-56, are limits for the function of the actual size of the character that is to be outputted), which is different for each of the two or more kinds of objects (column 71, lines 45-55, corrections on size based on each characters).

Regarding claim 11: Miyaza teaches the information processing apparatus further comprising output means (column 72, lines 24-25) for outputting the two or more kinds of objects included in the document data based on the size information associated with each of the two or more kinds of objects. (Column 71, lines 35-55)

Regarding claim 16: Miyaza teaches an information processing method that comprises: a memory step of storing layout information (image data stored in the main memory, column 71, lines 10-15, the image data give enough data such that an image, such as ABC, fig. 91a would be reproduced; the image A, as an example, has its own layout information such as the position of the letter A is before letter B and C and the letter A has a unique shape; therefore, image data has layout information) in layout memory means, when document data (image data, column 71, lines 10-15, e.g., characters 50 fig. 91a) is outputted to an output apparatus (output means, column 72, line 24; the image data is reproduced and outputted to the output means, column 72, lines 20-25); a display screen (41, fig. 4, column 8, lines 65-66) for displaying; and an associating step of (magnifying means, column 72, lines 12-13, and judging means, column 72, lines 20-21 associates an object with two size limits such that the object being printed is within the size limits, column 71, lines 24-55) associating each

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document objects (character 62 or 63, column 71, lines 45-55, fig. 91a) with size information (values of the highest and lowest limits, column 70, lines 54-56) having a relation between a size of a document output area (the highest and the lowest limit determine the range of the size of the magnified character to be outputted, column 71, lines 46-53; the size of the magnified character is the size of a document output area) and the size of the object (the size of the magnified character, column 71, lines 45-55; the highest and lowest limits determine the actual size of the character that is to be outputted; e.g., outputting the size of the magnified character when the magnified character is within the limits or outputting the size of the corrected character when the magnified character is outside the limits, column 71, lines 39-55; the size of the object is the actual print size of the character when the document is printed) when the document data is outputted (image data of the document is reproduced and outputted from compositing means, column 72, lines 21-25, to the output means) to the output apparatus (output means, column 72, lines 24) based on the layout information (e.g., the position of where the image of the document is to be placed, fig. 91a, the shape of the character, fig. 91a).

Miyaza does not teach display control means for displaying the two or more objects included in the document on the display screen.

Aoyama, in the same area of copying document using a copier (column 4, line 30), teaches display control means (21, fig. 2) for displaying two or more objects (e.g., circle graph 30, column 7, lines 43-45; document image, column 7, lines 29-40) included in the document on a display screen. (Display unit 22, column 7, line 32)

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the display of Miyaza to include: display control means for displaying the two or more objects included in the document on the display screen.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the display of Miyaza by the teaching of Aoyama because of the following reasons: (a) using a display controller to control a display would have allowed other controllers, such as the image processing controller 74, of fig. 5, Miyaza, of the copier, to perform image processing function without having to control the display; it would have increased the processing speed of the copier to increase productivity; and (b) displaying the document objects would have allowed users to view the objects first before printing and thereby reduces copying error such as copying the wrong document or a part of the object is not being copied.

Note: the document object is being displayed after the modification. In other word, the document object is the same object that is being displayed. Therefore, the size information that is also associated with the document object is also associated with the displayed object.

Regarding claim 19: Miyaza teaches wherein the size information associated with each of the two or more kinds of objects is function information (since the actual size of the character that is to be outputted is a function of magnification rate, column 71, line 8, and the size of the character that is to be magnified by the magnification rate; (inherent properties of magnifying a character by a magnification rate); the highest and

the lowest limits, column 70, lines 45-56, are limits for the function of the actual size of the character that is to be outputted), which is different for each of the two or more kinds of objects (column 71, lines 45-55, corrections on size based on each characters).

Regarding claim 22: Miyaza teaches the information processing apparatus further comprising output means (column 72, lines 24-25) for outputting the two or more kinds of objects included in the document data based on the size information associated with each of the two or more kinds of objects. (Column 71, lines 35-55)

Regarding claims 27, 30, 33: Miyaza teaches a CPU (column 70, lines 30-35) which performs function steps, as discussed in claims 16, 19, 22 using embodiment 41.

Miyaza, in embodiment 41, does not teach a memory medium which stores a computer readable program to control the CPU.

However, Miyaza, in embodiment 30 teaches a memory medium (ROM 102, column 52, lines 40-45) which stores a computer readable program (column 52, line 42) for controlling a CPU. (CPU 101, column 52, lines 40-43)

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified Miyaza/Aoyama's CPU to include: a memory medium which stores a computer readable program to control the CPU for performing processing steps.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the CPU of Miyaza/Aoyama because of the following reasons: (a) using a computer program for controlling a CPU would have reduced the price of the CPU because it would reduce all the additional hardware that is

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required for the CPU to performing all the functions; it would also have allowed the same type of CPU to be programmed differently to perform different functions; and (b) using a memory for storing the program would have prevented the program from being lost such that the program can be used over and over again to control the CPU.

Response to Arguments

8. Applicant's arguments filed 10/23/2003 have been fully considered but they are not persuasive.

With respect to applicant's argument that Miyaza does not teach area size determining means for determining a size of a document output area when document data is outputted to an output apparatus based on layout information; object size determining means for determining a size of each of the plural kinds of objects based on the size determined by the area size determining means and the size information stored in the information memory means; size changing means for changing the size of the size of each of the plural kinds of objects based on each size determined by the object size determining means respectively; and control means for outputting each of the plural kinds of objects whose size has been changed by the size changing means to the output apparatus, has been considered.

In reply: Miyaza teaches an information processing apparatus (digital copy machine, column 70, line 30) which comprises: area size determining means (calculating means that calculates a width/size of the line that constructs magnified

characters, column 72, lines 29-32) for determining a size (width of a line of a magnified characters, column 72, line 15, e.g., fig. 91a) of a document output area (the magnified characters are to be outputted to an area of a print sheet, column 72, lines 43-48; therefore, the size of the magnified characters are the document output area) when document data (e.g., characters and image data, column 72, lines 23-25, 50, fig. 91a, that is to be printed) is outputted to an output apparatus (output means, column 72, lines 38-42) based on layout information (the size of the characters, e.g., sized of the magnified characters, column 71, lines 35-45, and the different shape and position of characters, e.g., 50, fig. 91a); information memory means (main memory, column 70, lines 50-55) for storing a plurality of size information (the values of the highest and lowest limits, column 70, lines 54-56) having a relation between a size of a document output area (the highest and the lowest limit determine the range of the size of the magnified characters to be outputted, column 71, lines 46-53) and the size of each of the plural kinds of objects (characters, fig. 91a, the highest and lowest limits determine the actual size of the character that is to be outputted; e.g., outputting the size of the magnified characters when the magnified characters are within the limits or outputting the size of the corrected characters when the magnified characters are outside the limits, column 71, lines 39-55) included in the document data (document data outputted, column 72, lines 23-25 includes actual sized of the character); object size determining means (the circuit or program step S40 of fig. 90 that determines the actual size of the character to be outputted, e.g., outputting the size of the magnified character or the size of the corrected character, column 71, lines 39-55) for determining a size of each of the

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plural kinds of objects (the actual size of characters to be printed, e.g., characters 62, or 63, column 71, lines 35-55) based on the size (e.g., the size of the magnified characters, column 71, lines 35-40, and column 71, lines 45-55) determined by the area size determining means and the size information (the values of the highest and lowest limits, column 70, lines 54-56) stored in the information memory means; size changing means (the circuit or program step S43 of fig. 90) for changing (correction, column 71, lines 50-55) the size (column 71, lines 50-51) of the size of each of the plural kinds of objects (characters) based on each size (e.g., the size of the character is determined to be the size of the predetermined range, column 71, line 50-52) determined by the object size determining means (no of S40, fig. 90) respectively; and control means (compositing means, column 72, lines 20-25, lines 36-38) for outputting each of the plural kinds of objects whose size has been changed by the size changing means to the output apparatus (column 72, lines 20-25).

With respect to applicant's argument that the references cited does not teach layout information memory means for storing layout information when document data is outputted to an output apparatus; display control means for displaying two or more kinds of objects included in the document data on a display screen; and associating means for associating each displayed object with size information having a relation between a size of a document output area and a size of a displayed object when the document data is outputted to the output apparatus based on the layout information; has been considered.

In reply: Miyaza teaches an information processing apparatus (digital copying machine, column 70, line 30) which comprises: layout information memory means (main memory 73, column 71, lines 10-15) for storing layout information (e.g., the position of where the image of the document is to be placed, fig. 91a, the shape of the character, fig. 91a, are in the image data stored in the main memory) when document data (image data, column 71, lines 10-15, e.g., characters 50, fig. 91a) is outputted to an output apparatus (output means, column 72, line 24; the image data is reproduced and outputted to the output means, column 72, lines 20-25); a display screen (41, fig. 4, column 8, lines 65-66) for displaying; and associating means (magnifying means, column 72, lines 12-13, and judging means, column 72, lines 20-21) for associating document objects (characters 62 or 63, column 71, lines 45-55, fig. 91a) with size information (values of the highest and lowest limits, column 70, lines 54-56) having a relation between a size of a document output area (the highest and the lowest limit determine the range of the size of the magnified character to be outputted, column 71, lines 46-53; the size of the magnified character is the size of a document output area) and a size of the object (the size of the magnified character, column 71, lines 45-55; the highest and lowest limits determine the actual size of the character that is to be outputted; e.g., outputting the size of the magnified character when the magnified character is within the limits or outputting the size of the corrected character when the magnified character is outside the limits, column 71, lines 39-55; the size of the object is the actual print size of the character when the document is printed) when the document data is outputted (image data of the document is reproduced and

outputted from compositing means, column 72, lines 21-25, to the output means) to the output apparatus (output means, column 72, lines 24) based on the layout information (e.g., the position of where the image of the document is to be placed, fig. 91a, the shape of the character, fig. 91a).

Miyaza does not teach display control means for displaying the two or more objects included in the document on the display screen.

Aoyama, in the same area of copying document using a copier (column 4, line 30), teaches display control means (21, fig. 2) for displaying two or more objects (e.g., circle graph 30, column 7, lines 43-45; document image, column 7, lines 29-40) included in the document on a display screen. (Display unit 22, column 7, line 32)

Therefore, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the display of Miyaza to include: display control means for displaying the two or more objects included in the document on the display screen.

It would have been obvious to a person with ordinary skill in the art at the time the invention was made to have modified the display of Miyaza by the teaching of Aoyama because of the following reasons: (a) using a display controller to control a display would have allowed other controllers, such as the image processing controller 74, of fig. 5, Miyaza, of the copier, to perform image processing function without having to control the display; it would have increased the processing speed of the copier to increase productivity; and (b) displaying the document objects would have allowed

users to view the objects first before printing and thereby reduces copying error such as copying the wrong document or a part of the object is not being copied.

Note: the document object is being displayed after the modification by Aoyama. In other word, the document object is the same object that is being displayed. Therefore, the size information that is associated with the document object is also associated with the displayed object.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

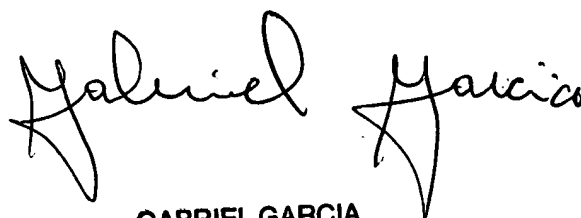
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Conclusion

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to King Y. Poon whose telephone number is (703) 305-0892

12/23/03


GABRIEL GARCIA
PRIMARY EXAMINER